

Monthly Report for January 2018

Submitted February 5, 2018

Meetings and Conference

Expert Group Meeting - Defining Linkages between K-12 and Workforce Data Systems

The [Workforce Data Quality Campaign](#) (WDQC) and the [Data Quality Campaign](#) (DQC) held a meeting on December 11, 2017 to develop a set of best practices and ideas for states that are implementing or further developing longitudinal data systems. Ross Goldstein took part in the meeting that covered topics including system governance, strategies for improving data quality and data matching, ideas for impactful data use, and strategies for building capacity.

2017 WDQC Fly-In: Energized For Evidence

The WDQC held a conference on December 12th and 13th in Washington, D.C. The conference included opportunities for peer learning and to gain information on initiatives at the federal level to make improvements to federal data policy. Ross Goldstein took part in the meeting along with other leaders from state workforce and education agencies, community colleges, research centers, and policy organizations. The event included sessions for participants to discuss data collection and use challenges, as well as opportunities to meet with federal leaders in this field and learn about initiatives to improve data collection and use at the federal level.

Governor's Workforce Development Board

Ross Goldstein and Ann Kellogg were invited to the December 13th meeting of the Governor's Workforce Development Board to provide an overview about the MLDS Center and the research conducted for the More Jobs for Marylanders Act Report.

Senate Budget and Taxation Committee

On January 17th, Ann Kellogg, Angela Henneberger and Laia Tideman provided a briefing for the [Senate Budget and Taxation Committee](#). The team gave a brief overview about the Center and highlighted collaborative engagements with partner agencies and other stakeholders that provided relevant information to inform choices.

State Board of Education

Ross Goldstein was invited to give a brief presentation to the Maryland State Board of Education on the MLDS Center and its work with MSDE. The State Board was particularly interested in how topics are selected and what capabilities the Center has to answer certain questions.

DLLR Division of Workforce Development and Adult Learning (DWDAL)

Ross Goldstein, Laia Tideman, Angela Henneberger, Tejal Cherry and Ann Kellogg met with DWDAL to continue to explore the potential to collaborate on projects. The meeting focused on the need for data for non-credit postsecondary courses for DWDAL to fulfill reporting requirements.

Center Output

Output Matrix

The Center finalized the Output matrix. All output will be aligned to one of the categories in the matrix to ensure consistency of output. The Center will also develop a template for each output category. The templates will be used by Center staff as well as external researchers for all output.

Info Briefs

The Center finalized the content and design of its first two Info Briefs. Info Briefs highlight important data points from existing dashboards and provide contextual information for those data points. Both briefs will be presented to the Research and Policy Advisory Board for review and discussion.

Pathways and Pipelines

The Center continued work on expanding the high school pathway report produced last year. The expansion includes broadening the timeframe for enrolling in and graduating from college as well as adding wage data for each population group. The Center also continued work on the teacher pipeline study. This study explores various pathways for becoming a Maryland public school teacher.

Issue Spotlights

The first draft of an Issue Spotlight was completed. The Issue Spotlight provides a summary of key data points from the Center's research report *Workforce Outcomes in Maryland for Students Who Do Not Attend College*. This is the first Issue Spotlight produced by the Center.

Dashboard Updates and Expansions

The dashboard series on initial enrollment of high school graduates is being updated to include additional years of data as well as new data points. The new data points will explore the frequency with which high school graduates remain in their county for college. This data will be visualized using a mapping tool rather than displayed in a table. Additional updates will be done to the series to provide aggregated data in addition to trend data for each dashboard.

Data Requests

The Center received five new data requests in January, two of which have been completed. The Center is continuing its work on seven data requests received at the end of 2017.

Research Branch

Research Series

The first research series of the Spring semester was held Thursday, February 1, 2018. Mr. Heath Witzgen, Research Fellow with the Center presented research that focuses on the effects of career and technical education (CTE) in Maryland. CTE has become a topic of considerable policy-making interest as a way of providing specialized education and expanding the number of career pathways available to high schools students. Analyses with Center data have been finalized to examine the effect of CTE program completion during high school on postsecondary outcomes, including college enrollment and workforce wages.

Research Reports

The final research report on brain drain in Maryland has been prepared for publication to the Center's website. This report finds that brain drain does exist in Maryland: Maryland public high school students who go out of state for a 4-year college are less likely to appear in the Maryland workforce when compared to similar students who stay in state for 4-year college.

Final statistical analyses for the research report examining the effects of dual enrollment on college enrollment, degree attainment, and workforce wages have been prepared for suppression review. The research report has been drafted, and is being prepared for publication to the Center's website.

A first draft of the report on the effects of the Educational Assistance (EA) grant has been prepared for internal review. This report examines the effects of the EA grant on college persistence and success and examines the heterogeneity of effects by important high school student characteristics.

MLDS Center research staff are currently working on a research study examining individual level poverty and school level poverty in response to a request by Senator Ferguson. This study has particular relevance as the state and local school districts consider the need for funding and other interventions for schools with high concentrations of poverty. The research study results will shed light on whether there are unique effects of school concentrated poverty, above and beyond the effects of individual poverty, on students' long-term outcomes. Research staff are in the process of reviewing descriptive statistics prior to conducting advanced statistical models that correctly account for both individual student and contextual school factors.

Conferences

Dr. Mathew Uretsky, Research Fellow with the Center, presented his work using MLDS data at the *Society of Social Work and Research* (SSWR), an organization dedicated to advancing research in social work. The work examined the college and career outcomes of Maryland students who are "persisters," students who did not graduate from high school, but did not drop out of high school.

Dr. Bess Rose, Statistician with the Center, attended the *Beyond Housing* conference in New York January 11-12. This conference is conducted by The Institute for Children, Poverty, and Homelessness (ICPH), a New York City-based policy research organization focused on family homelessness in New York City and throughout the United States. ICPH publishes research on its website targeted to policy makers and members of the public, using highly engaging data visualization. Dr. Rose attended conference sessions from experts in the field, including practitioners, researchers, and policy makers from across the nation, that are proving helpful for the MLDS Center's work on the poverty study, described above. Dr. Rose also met with Liz Cohen, the chief of staff of the ICPH, who is interested in partnering with the MLDS Center to conduct analyses and publish reports examining poverty and homelessness in Maryland.

Synthetic Data Project

The SDP Team has been focused on two central tasks over the past couple months. First, the team is addressing data issues related to the Gold Standard Datasets (GSDS). Second, the team is aggregating and implementing what was learned from the expert panel in terms of synthesization. In terms of data

work related to the GSDS, the team has initiated monthly meetings with the MLDS data analysts to gain their insights and knowledge about the data and coordinate decisions about how to handle various data issues, such as how to simplify the data and data structure when possible and how to handle missing data patterns. These meetings are very valuable since GSDS are a critical component to the project's success.

The team has also been analyzing the transcripts of the meeting with the data imputation and synthesization experts to inform the synthesization procedures that the team will use for this project. The team has also submitted an abstract to the *Joint Statistical Meeting Conference* to be held this summer in Vancouver, Canada to share what has been learned in this cutting edge project with other professional statisticians.

The initial 6 month contract for a database project manager (PM) for SDP expired at the end of January. The current contracted person has unfortunately been unavailable since early December. Accordingly the team is in the middle of a process with MSDE to award a new contract.

System Management Tasks

Tasks

The System Management team worked on the following tasks this month:

1. System Patches - The Center is now on DoIT's regular patching cycle for all servers, virtual machines, desktops and laptops.
2. Firewall Rules - The Center is working with DoIT to review all firewall rules and remove unnecessary list of rules.
3. Procurement - Center procured and implemented new business intelligence tools *QLIK* and *TABLEAU*. These tools will be used for Center output in addition to the Oracle tools currently being used.
4. Encryption - DoIT encrypted the MLDSC desktops similar to what was done for laptops. Unfortunately, the Center's desktops "Dell Optiplex 790" are having multiple issues with this encryption. Staff is exploring other options for desktop encryption with DoIT.
5. Master File Transfer Software (MFT) - The Center procured and implemented *GoAnywhere* product to use as the Center's new MFT solution. Partner agencies are successfully using the system to securely transfer files with encryption in flight and at rest.
6. Intrusion Detection System - Staff worked with CyberESI to refine the weekly report and implement additional monitoring rules. IDS is monitoring all traffic that accesses the secured database with PII information.
7. Moving MLDSC Data Center to DoIT TierPoint Data Center - The Center had meetings with MSDE CIO and DoIT State CIO to discuss various options for moving the Center's data center. Staff is currently evaluating Oracle licenses and necessary efforts.

Data Loads

1. Completed loading 2017 enrollment data received from MHEC.
2. Performed identity resolution for individuals who have multiple system ID's for the same identifier (SSN).

Website - Top 10 Dashboards Hits

<i>Dashboard</i>	<i># of Hits</i>
2. High School Graduates - Initial Postsecondary Enrollments By Year	45
1. High School Graduates - Initial Postsecondary Enrollments	32
16. Initial Postsecondary Enrollments - Type of Institution by Race/ Ethnicity	13
26. Workforce Participation by High School Outcomes	8
28. High School Outcomes by Industry	8
25. Overview of High School Outcomes	7
27. Median 4-Quarter Wages by High School Outcomes	6
30. High School Outcomes by Industry and Median Wages	5
4. High School Graduates - Initial Postsecondary Enrollments By Gender	4
10. High School Graduates - Initial Postsecondary Enrollments By FARMS Status	3